

Application No.: 09/437378

Docket No.: OIQ-001RCE

REMARKS

Applicants have amended claims 1, 6, 9, 17, 19, 22 and 27 to further clarify the claimed invention. Claims 35-38 have been added and claims 25-26 have been cancelled. Thus claims 1-6, 9-13, 15-24 and 27-38 are presently pending.

Claim Rejections Pursuant to 35 U.S.C. §103(a)

Claims 1, 2, 4-6, 9, 11-13, 15-20, 22 and 24-26 were rejected by the Examiner pursuant to 35 U.S.C. §103(a) as being unpatentable over White et al (United States Patent Number 5933490, hereafter "White et al") in view of Sotomayor et al (United States Patent Number 5,708, 825, hereafter "Sotomayor et al"). In view of the above amendments and the below remarks, those rejections are respectfully traversed.

Summary of Claimed Invention

The claimed invention provides a mechanism for a hyperlink associated with a semantic value to be resolved based on a user-supplied preference to retrieve digital objects. For example, if a user that clicks on a hyperlink referencing certain content has access to both subscription-based services and non-subscription based services, the user determines which of the services is to be used in resolving the hyperlink to one or more resources for the content. On the other hand, where a user does not subscribe to a subscription-based service, the hyperlink may be resolved by non-subscription-based services when the user clicks on the hyperlink. The user-supplied preference enables a hyperlink to be resolved differently based upon whether the user has access to subscription-based services and/or non-subscription-based services.

The claimed invention provides a controlled vocabulary that is used to specify a unique variety of hyperlink. The hyperlink contains a semantic value and a uniform resource locator (URL). The URL is not for a service provided to resolve the hyperlink, but rather refers to a hyperlink redirection facility. The hyperlink redirection facility receives user-supplied information regarding user preferences for resolution services (in one implementation through the use of a cookie). Alternatively, the hyperlink redirection facility may query the user for preferred resolution service. The hyperlink redirection facility modifies the original request to

Application No.: 09/437378

Docket No.: OIQ-001RCE

take into account the user preference and returns the modified request to the user for forwarding to a service provider for request resolution. The service provider receives the modified request and directs the request to a resolution facility that provides resources, such as search results. The resources are then returned to the user by the service provider.

Summary of White et al

White et al discusses a load balancing method for dial up access to the Internet. The method allows for redirected access for an ISP (Internet Service Provider) attempting to connect to the Internet backbone. An Internet Service Control Point redirects calls to alternate lines in the event of overload situations. Calls are re-directed based on preferences stored by the ISP combined with dynamically compiled call information (see col. 4, line 3 – col. 5, line 12). The user may request an alternate access line in the event of difficulties connecting via the primary line. The request being responded to is an access request prior to the establishment of an Internet connection. White does not discuss the redirection of hyperlink requests referencing semantic content. It does not discuss hyperlink requests. It does discuss redirection of requests but the redirection is based on ISP supplied preferences for access and is not based on semantic content associated with a user request.

Summary of Sotomayor et al

Sotomayor et al discusses the automated identification of significant topics, concepts and phrases in documents and the creation of summary pages for the documents. Sotomayor et al also discusses the automatic creation of hyperlinks between the identified key topics. A semantic analyzer program examines user selected documents to automatically identify key topics within the document, compile the topics into summary pages, and generate presentation pages by segmenting the selected documents into smaller pages. Hyperlinks are embedded in the summary pages to the topics in the presentation pages. Sotomayor et al does not include or discuss a redirection facility that is an intermediary.

Application No.: 09/437378

Docket No.: OIQ-001RCE

Summary of Claim Amendments

Applicants have amended claims 1, 6, 9, 17, 19, 22 and 27 to further clarify that the user information used by the redirection facility is "user-supplied" by the same user making the request and not provided by a third party involved in the processing of the request such as an ISP. Applicants have further amended claims 1, 9, 19, 22 and 27 to specify that the semantic value is a descriptive term or identifier for the requested resource. Claims 1 and 19 have also been amended to clarify that the hyperlink redirection facility receives a request originating from a user selection of a controlled vocabulary abstract hyperlink that includes a semantic value and an URL (Uniform Resource Locator) address of the hyperlink redirection facility. Similarly, claims 9 and 22 have been further amended to indicate that the received link information includes a semantic value and an URL address of the hyperlink redirection facility. Claim 27 has also been amended to indicate that the selected request is modified based on the user-supplied preference and directed to the user for forwarding to a service provider for servicing.

Argument

The Examiner rejected independent claim 1 upon which claims 2 and 4-5 are dependent, independent claim 6, independent claim 9 upon which claims 11-13 and 15-16 are dependent, independent claim 17, upon which claim 18 is dependent, independent claim 19 upon which claims 20-21 are dependent, and independent claim 22 upon which claim 24 is dependent, for being unpatentable over White et al in view of Sotomayor et al. Each of these rejections is examined below.

In amended independent claim 1 and amended independent claim 19 (the corresponding medium claim) and their respective dependents, the first step of the method requires the user selection of a controlled vocabulary abstract hyperlink as part of a request to access information. The controlled vocabulary abstract hyperlink includes a semantic value (which has been further defined as being a descriptive term or identifier for the requested information) and an URL. Unlike traditional hyperlink information requests however, the URL is not an address of a resource to satisfy the request for information, but rather is an address of the hyperlink redirection facility. The hyperlink redirection facility is an intermediary performing redirection

Application No.: 09/437378

Docket No.: OIQ-001RCE

of the request and has more than one possible target profile for each request. Neither White et al or Sotomayor disclose, teach or suggest the use of a controlled vocabulary abstract hyperlink as defined in the claims and specification of Applicants invention. Neither White et al or Sotomayor disclose, teach or suggest the use of an intermediary (the hyperlink redirection facility) as claimed. Furthermore, the redirection of White is based on load balancing concerns and has nothing to do with a semantic value in a request to access information.

The second listed step in amended independent claim 1 and amended independent claim 19 and their respective dependents, involves identifying a user-supplied preference regarding which service provider to use to service the request. The "request" is the request for information discussed immediately above. White et al discloses only the acceptance of a user preference regarding access lines and Sotomayor completely lacks any sort of discussion regarding the limitation.

The third listed step in amended independent claim 1 and amended independent claim 19 and their dependents, involves the directing of the request, modified based on the user preference, back to the user for forwarding to a service provider for servicing. Neither White et al or Sotomayor discloses, teaches or suggests the returning of modified request to the user. Likewise, neither reference discloses, teaches or suggests the modification of the request for information based on the user-supplied preference.

Since the combination of references fails to disclose, teach or suggest all of the limitations in any of the three steps of independent claims 1 and 19, Applicants believe claims 1-5, and 19-21 (as well as new claims 35 and 36) are now in condition for allowance and requests the rejections directed to those claims be withdrawn.

Independent claim 6 includes the step of receiving a request to access information which includes a semantic value at a hyperlink redirection facility. Claim 6 also includes the step of identifying a user-supplied preference regarding which service provider to use to service the request (for information). Like claim 1, claim 6 includes the step of directing the modified request to the user for forwarding to a service provider. Claim 6 additionally includes the step of identifying a second service provider to use to service the request in the event the first service

Application No.: 09/437378

Docket No.: OIQ-001RCE

provider fails to fully service the request and the forwarding of the request with the identified second service provider to the user for forwarding to that second service provider. In addition claim 6 includes the step of identifying the first service provider that failed to fully service the request at the redirection facility before the direction of the request to the user for forwarding to the second service provider. As discussed above, White et al does not involve semantic values associated with a request. Neither cited reference discloses, teaches or suggests the modification of a request to access information based on a user-supplied preference. Neither White et al nor Sotomayor discloses, teaches or suggests the returning of a modified request to the user. Similarly, neither discusses the returning of a modified request to the user for forwarding to a second service provider following a failure of a first service provider to fully service the request. The cited references also lack the identification of the first service provider that failed to fully service the request. Since the combination of references fails to disclose, teach or suggest all of the limitations of claim 6, Applicants believe claim 6 is now in condition for allowance and requests the rejection be withdrawn.

Amended independent claim 9, and amended independent claim 22 (the corresponding medium claim for claim 9) and their respective dependents have been amended to specify that user-supplied information regarding a user and link information regarding a controlled vocabulary abstract hyperlink to be resolved to a resource are received by the redirection facility in response to a user selecting the hyperlink. The claims have further been amended to specify that the link information includes a semantic value and an URL and that the semantic value is a descriptive term or identifier regarding the requested resource. The claims have also been amended to indicate that the user-supplied information is used to identify a resolution service. The claims also require the step of forwarding at least some of the link information via the requesting user to a resolution service for resolution of the hyperlink. As discussed above in the discussion of claims 1 and 19, none of these steps is included in the combination of White et al and Sotomayor. Accordingly, Applicants believe the rejections of claims 9, 11-13, 15-18, 22, and 24 should be withdrawn and those claims as well as new claims 37 and 38 (which are dependent upon claims 9 and 22 respectively) should be allowed.

Claim 17 (and claim 18 which is dependent thereon) has been amended to specify that user-supplied information regarding a user and link information regarding a hyperlink to be

Application No.: 09/437378

Docket No.: OIQ-001RCE

resolved to a resource are received in response to a user selecting the hyperlink. The claims have also been amended to indicate that the user-supplied information is used to identify a resolution service. As mentioned in the discussion of claims 9 and 22 above, the combination of references lacks these elements. Claims 17 and 18 also require the step of forwarding at least some of the link information via the requesting user to the identified resolution service for resolution of the hyperlink, the identification of a second resolution service and forwarding of the link information where the first resolution service fails to return content to the user, and the identification of the failed resolution service. Neither White et al or Sotomayor discloses, teaches or suggests these final three elements. Accordingly, Applicants believe the rejections of claims 17 and 18 should be withdrawn and that the claims should be allowed.

Claims 3, 10, 21 and 23 were rejected by the Examiner pursuant to 35 U.S.C. §103(a) as being unpatentable over White et al in view of Minor et al (United States Patent Number 5, 740, 252, hereafter "Minor et al"). In view of the above amendments and the below remarks, those rejections are respectfully traversed.

Minor et al is cited by the Examiner to show the use of a cookie. As Applicants have pointed out above however, the combination of White et al and Sotomayor et al fails to disclose, teach or suggest the claimed invention as set forth in claims 1, 9, 19, and 22 (upon which claims 3, 10, 21 and 23 are dependent) (Applicants assume the Examiner meant to include Sotomayor in the rejection since the Examiner relied upon it for the rejection of the independent claims). Since Minor fails to disclose, teach or suggest the missing limitations, the rejections are unsupported and should be withdrawn.

Claims 27-34 were rejected by the Examiner pursuant to 35 U.S.C. §103(a) as being unpatentable over White et al in view of Sotomayor et al in further view of Gerace (United States Patent Number 5,991,735, hereafter "Gerace"). In view of the above amendments and the below remarks, those rejections are respectfully traversed.

Claim 27 and the underlying dependent claims 28-34 include many of the elements discussed above, including the receipt at a redirection facility of a request to access a given

Application No.: 09/437378

Docket No.: OIQ-001RCE

resource which includes a semantic value associated with a hyperlink where the semantic value is a descriptive term or identifier for the resource. Claim 27 has also been amended to specify that the selected request is modified based upon a user-supplied preference and that the modified request is directed to the user for forwarding to a service provider for servicing of the request. As previously discussed, the combination of White et al and Sotomayor et al does not teach, discuss or suggest these limitations. Gerace, which is cited by the Examiner as teaching a method of deciding whether to present an advertisement to a requestor, also lacks these elements of the claimed invention. Accordingly the combination of references fails to disclose all of the elements of independent claim 27 and its dependent claims and the rejections directed to claims 27-34 should therefore be withdrawn.

In addition to the individual rejections discussed above, the Applicants respectfully suggest that all of the rejections offered by the Examiner which rely on the combination of White et al and Sotomayor et al (with or without additional references combined) are unsupported as there is nothing contained within either White et al or Sotomayor et al which teaches or suggests its combination with the other. White et al has nothing to do with a semantic based redirection. It is directed towards load balancing issues from an ISP standpoint, specifically the direction and redirection of incoming access requests to an appropriate trunk line based on ISP preferences. Sotomayor discusses the categorization of content to create hyperlinked summary pages but has nothing to do with a redirection facility. There is no support within either reference for the Examiner's proposition that it would have been obvious to implement "the redirection to occur from the selecting of a hyperlink within the redirection method and program because hyperlinks are well known and used in the Internet via a browser to directly connect or link from one site to an affiliated site as well as from a query search, therefore when a user selects a hyperlink and the associated site is down or experiencing heavy load, then the teachings of White would prevent the user from having to wait or access the requested information at another time (page 3 of Examiner's Office Action of September 8, 2003)." Nothing in White et al or Sotomayor et al supports the Examiner's statement. It is not permitted to combine together features of references solely to cover all of the elements of a claimed invention when the motivation for doing so is lacking in the cited prior art.

Application No.: 09/437378

Docket No.: OIQ-001RCE

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Applicant believes a three month extension fee in the amount of \$475.00 is due in connection with this response. Please charge our Deposit Account No. 12-0080, under Order No. OIQ-001 from which the undersigned is authorized to draw.

Dated: March 8, 2004

Respectfully submitted,

By John A. Curran
John A. Curran
Registration No.: 50,445
LAHIVE & COCKFIELD, LLP
28 State Street
Boston, Massachusetts 02109
(617) 227-7400
(617) 742-4214 (Fax)
Attorney/Agent For Applicant